

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division**

REALVIRT, LLC,
Plaintiff,

v.

MICHELLE K. LEE,
Defendant.

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Case No. 1:15-cv-963

MEMORANDUM OPINION

In this 35 U.S.C. § 145 action, plaintiff challenges a United States Patent and Trademark Office (“PTO”) decision rejecting the patentability of the inventions claimed in U.S. Patent Application Serial No. 07/773, 161 (the “ ‘161 Application”). At issue on the parties’ cross-motions for summary judgment and the PTO’s motion to dismiss are (i) whether plaintiff has standing to bring a § 145 action, and (ii) if so, whether the inventions claimed in the ‘161 Application are patentable. As the matter has been fully briefed and argued orally, it is now ripe for disposition.

I.

The pertinent facts, derived from the parties’ statements of undisputed facts and the Administrative Record (“AR”), may be succinctly summarized.

Plaintiff Realvirt, LLC, a Delaware Corporation with its office in Massachusetts, is the purported assignee and owner of the ‘161 Application. Defendant Michelle K. Lee is the Under Secretary of Commerce for Intellectual Property and the Director of the PTO. Anthony Z. Bono (“Tony Bono”) and Joachim C.S. Martillo (“Joachim Martillo”) are two of the six declared inventors of the inventions claimed in the ‘161 Application. Tony Bono and Joachim Martillo

purportedly assigned their rights to the '161 Application to plaintiff by virtue of a written document dated February 15, 2013.

A.

The '161 Application describes inventions related to a network switching device that connects computers through networks. As the '161 Application specification explains, bridges and routers are two types of network switching devices. A bridge is “a well known type of network switching device to which multiple branches of a network are connected”; a router, like a bridge, “switch[es data] packets between branches of a network,” but unlike a bridge, “operate[s] at the next higher level of network software, the so-called network layer, and ... provide[s] more flexibility and control of the actual route which the packet takes through the network.” AR at 5. The specification further explains that because bridges and routers have their own advantages and disadvantages, it is often desirable to configure a network by using a combination of bridges and routers.

The '161 Application claims a network switching device that is a “software configurable bridge/router.” AR at 8. This device provides a “software means” of enabling users to “group [] input/output devices into one or more logical bridges” and to “connect the bridges with one or more logical routers.” AR at 7. The specification explains that a user may configure the bridge/router device through a “configuration routine,” as shown in Figure 8. *See* AR at 177. The configuration routine includes a number of menus that allow a user to select his desired configuration settings, and these settings can be stored in the data structures shown in Figures 9-11. *See* AR at 173-76 (showing examples of various bridge/router configurations). Once a user enters his desired bridge/router configuration settings and once these settings are stored in data structures, the configuration settings may be implemented on the bridge/router device in one of

two ways: (i) a “static” configuration, or (ii) a “dynamic” configuration.¹ When the static configuration method is selected, the bridge/router device is reset, causing an initialization routine to run. The initialization routine “creates the data structures of FIGS. 9-11 in RAM, copies configuration data from NOVRAM into them,² and then fills out or update[s] the other fields of those data structures.” AR at 9-10. Then “the bridge/router ... prepare[s] to operate as configured by the user in the routine of FIG. 8.” *Id.* By contrast, when the dynamic configuration method is selected, the configuration settings for the bridge/router device are changed while the device is running—that is, without resetting the device.³

The ‘161 Application includes numerous claims, and the parties agree that all claims in issue (1, 2, 5-16, and 18-39) rise or fall with representative claim 24, incorporating the features of claim 23 (“Claim 24”). Claim 24 describes “[a] network switching device comprising”:

- (i) “a plurality of input/output devices being configured to communicate packets”;
- (ii) “a configuration routine that defines one or more logical bridges, wherein each of the one or more logical bridges includes one or more parts that provide one or more connections to a logical bridge, selectively associates each of said input/output devices with a selected one or more of said of [*sic*] logical bridges, and creates one or more data structures that represent which input/output devices have been associated with each logical bridge”;

¹ Although the specification does not use the terms “static” and “dynamic,” the PTO’s expert witness, Les Baxter, usefully distinguishes between these two configuration methods as “static” and “dynamic.” See Def. Ex. P, Baxter Report ¶ 64.

² “RAM” stands for random access memory, and “NOVRAM” stands for non-volatile random access memory.

³ In this regard, the specification describes the difference between the static and dynamic configuration methods as follows: “[i]n the preferred embodiment, the mapping between devices, bridges, and routers is only changed upon initialization [static], to avoid certain complexities which can arise from changing the network topology while the network is running,” whereas “[i]n embodiments designed to deal with such complexities, such mapping changes could be made while the network is running [dynamic].” AR at 10.

(iii) “a bridging routine that responds to said one or more data structures by creating said one or more logical bridges with which one or more input/output devices have been associated to operate as one or more separate media access control level bridge including, and having a port for, each of the input/output devices represented as being associated with such logical bridge by said one or more data structures”; and

(iv) “at least one processing unit and associated memory to execute said configuration routine to create said one or more data structures and said bridging routine to operate said one or more separate media access control level bridges”;⁴

(v) “at least one routing routine that responds to said one or more data structures representing which logical bridges have been associated with each logical router by causing one or more logical routers with which one or more logical bridges have been associated to operate as a separate network layer router having an interface to each of the logical bridges represented as being associated with such logical router by said one or more data structures.”

AR at 3005, Claims Appendix.

Although Claim 24 purports to recite a novel and non-obvious network switching device, the specification includes a minimal discussion of the hardware needed to build and operate the claimed invention. In this regard, the specification’s limited discussion of the hardware used for the network switching reflects the following:

The preferred embodiment of the invention is a computer system having a programmable CPU⁵ and the memory necessary to run the software capable of configuring the bridge/router and to operate it once configured. In the preferred embodiment, the CPU and memory are located on a printed circuit mother board. This mother board is designed so that additional printed circuit cards containing I/O devices⁶ can be plugged into it. The mother board contains an RS232 port⁷

⁴ The “configuration routine” also “selectively associat[es] each of said logical bridges with a selected one or more logical routers and creat[es] one or more data structures that represent which logical bridges have been associated with each logical router.” AR at 3005, Claims Appendix. And “the at least one processing unit and associated memory [are] further configured to execute the at least one routing routine to operate said one or more separate network layer routes.” *Id.*

⁵ A “CPU” is a central processing unit.

⁶ The term “I/O devices” refers to input and output devices.

capable of driving a standard terminal, enabling the system to project information about the system's current status and configuration on the screen of the terminal, and allowing the user to enter information to change and control the system on the keyboard of the terminal. In another embodiment, the programmable CPU, memory, multiple I/O devices, and RS232 port are all placed on one printed circuit board designed to fit into a standard computer. Those skilled in the art of computer design will understand that any combination of one or more programmable devices and memory, with more than one I/O device, could be used to create equivalent functionality.

AR at 9. The specification provides no description of an embodiment that allows the network switching device to change configuration settings using a dynamic configuration method.

B.

In 1988, Tony Bono and Joachim Martillo, two of the six declared inventors of the inventions claimed in the '161 Application, worked as business partners under the name Constellation Technologies and began developing a new type of network switch ("Constellation network switching device"). AR at 2673. Once developed, the Constellation network switching device would become the basis for the '161 Application.

At some point in 1988, Tony Bono and Joachim Martillo approached Tony Bono's brother, Vincent P. Bono ("Vincent Bono"), about an investment opportunity in Constellation Technologies. At the time, Vincent Bono was the President and majority shareholder of Clearpoint Research Corporation ("Clearpoint"), a company that designed and manufactured memory boards and other components for computer systems. After some discussion, the parties decided that, instead of an investment arrangement, they preferred for Clearpoint to hire Tony Bono and Joachim Martillo so that the two could continue to develop the Constellation network switching device as employees of Clearpoint ("Constellation Project"). Accordingly, on November 1, 1988, Tony Bono and Joachim Martillo entered into a written letter agreement with

⁷ An RS232 port allows a computer to connect to input and output devices.

Clearpoint (“1988 Letter Agreement”). The 1988 Letter Agreement provides that it is “a summary of the agreement we have for you to join Clearpoint and [to] have Clearpoint acquire the rights to the technology and intellectual property of Constellation Technologies.” AR at 133.

Plaintiff contends that the 1988 Letter Agreement was one in a series of agreements related to the Constellation Project (“Constellation Agreements”), and that most of these agreements were oral agreements. According to plaintiff, in one such oral agreement Clearpoint agreed to assign rights related to the Constellation network switching device to Tony Bono and Joachim Martillo upon the occurrence of certain future events (“1988 Oral Agreement”).⁸ Specifically, plaintiff contends that pursuant to the purported 1988 Oral Agreement, Clearpoint agreed to assign its rights related to the Constellation network switching device to Tony Bono and Joachim Martillo in the event (i) that Tony Bono and Joachim Martillo finished developing the Constellation network switching device while employed by Clearpoint, and (ii) that Clearpoint cancelled the Constellation Project or parted ways with Tony Bono and Joachim Martillo.

The Constellation network switching device was developed at some point while Tony Bono and Joachim Martillo were employed by Clearpoint, and on October 8, 1991, Tony Bono, Joachim Martillo, and the other four declared inventors filed the ‘161 Application. At that time, the ‘161 Application included only two claims; these two original claims were later amended.

Shortly thereafter, by written document executed in March 1992, each of the six declared inventors of the inventions described in the ‘161 Application, including Tony Bono and Joachim Martillo, assigned his “entire right, title and interest in, to and under [the ‘161 Application]” to

⁸ The parties agree that any other purported oral arguments that were part of the Constellation Agreements are not relevant here.

Clearpoint “for good and valuable consideration from Clearpoint” (“1992 Assignment”). AR at 95-96.

Thereafter, on January 7, 1993, the PTO mailed an Office Action including a Non-Final Rejection of the claims of the ‘161 Application. That same month, Clearpoint fired all of its employees, including Tony Bono and Joachim Martillo. Thereafter, on August 11, 1993, the PTO issued a Notice of Abandonment on the ground that the applicants had failed to file a timely response to the January 7, 1993 Office Action.

On July 29, 1993, Clearpoint and Penril Datacomm Networks, Inc. (“Penril”) entered into a Purchase Agreement (“1993 Penril Purchase Agreement”), which provides that “[Clearpoint] hereby sells, assigns, conveys, transfers and delivers to [Penril], and [Penril] hereby purchases and acquires the Assets, including all of [Clearpoint’s] right, title and interest therein and thereto free and clear of any liens, pledges, security interests, claims or encumbrances of any kind.” Def. Ex. G., 1993 Penril Purchase Agreement, at 4. The “Assets” Clearpoint assigned to Penril include, *inter alia*, “[a]ll patents, patent rights, ... [and] applications for patents ... relating to the Software and the Hardware Designs.” *Id.* at 2. The 1993 Penril Purchase Agreement further reflects (i) that “[Clearpoint] is the true and lawful owner of the Assets and has full power and right to sell, assign and transfer to [Penril] all of its rights, title and interest in and to the Assets”; (ii) that “[Clearpoint] owns the patents ... existing or pending, listed in Exhibit 4 hereto,” namely the ‘161 Application; (iii) that “there are no agreements or arrangements between [Clearpoint] and any third person which would have any effect upon Seller’s title to and other rights respecting the Assets,” *id.* at 8; (iv) that “no third party has any interest of any kind in any of the Assets,” except for “such interest or right, if any, as is described in Exhibit 3 hereto [the 1988 Letter Agreement] and same does not and will not interfere in any way with [Penril’s] right and

ability to use the Assets without monetary or other obligation of any kind to the parties identified in said Exhibit 3 [the 1988 Letter Agreement],” *id.* at 9.

Thereafter, on October 1, 1993, Tony Bono and Joachim Martillo each signed letter agreements with Penril (“1993 Penril Letter Agreements”), in which they (i) confirmed receipt of copies of the 1993 Penril Purchase Agreement; (ii) confirmed that “performance by Clearpoint and by Penril of their respective obligations [under the 1993 Penril Purchase Agreement] are not inconsistent with or violative of any agreement between [Tony Bono and Joachim Martillo] and Clearpoint,” AR at 402, 405; and (iii) represented that they held “no rights or interest in [the ‘161 Application] except to the extent described in [the 1988 Letter Agreement],” AR at 403, 406.

The 1993 Penril Letter Agreements further represented to Tony Bono and Joachim Martillo:

- (i) that “Penril acknowledges that you [Tony Bono and Joachim Martillo] have advised Penril that a dispute exists between you and Clearpoint with respect to the extent of your rights under the [1988 Letter Agreement]”;
- (ii) that “Penril confirms that nothing contained in either the [1993 Penril] Purchase Agreement or this letter is intended to diminish or otherwise adversely [a]ffect your rights under the [1988 Letter Agreement]”; and
- (iii) that “[i]f it is determined, either by agreement between you and Clearpoint, or as a result of litigation between you and Clearpoint that you have any rights in the Principal Assets, then you agree that notwithstanding such determination, you will not make any claim or assert any right against Penril which would interfere with or in any way adversely [a]ffect Penril’s right to use the Principal Assets to the full extent that it is permitted to do so under the [1993 Penril] Purchase Agreement, without payment to you of any kind.”

Id.

In 1993, Tony Bono and Joachim Martillo considered suing Clearpoint and Vincent Bono to clarify ownership of the ‘161 Application, but ultimately decided not to sue. Instead, during a fourteen-year period from 1993 to 2007, Tony Bono and Joachim Martillo repeatedly asked

Vincent Bono to sign a document recognizing Tony Bono's and Joachim Martillo's ownership of the '161 Application. Vincent Bono denied each of these requests.

Between October 2007 and September 2009, Tony Bono and Joachim Martillo filed three petitions to revive the '161 Application. Although the first two attempts were unsuccessful, the third attempt was successful, and the PTO revived the '161 Application. Shortly thereafter, Tony Bono and Joachim Martillo amended the original two claims in the '161 Application, and added new claims, namely claims 3-41. Claims 3 and 4 were later cancelled. Then, on February 28, 2013, the PTO, through the Office of Patent Legal Administration ("OPLA"), issued an Order to Show Cause challenging Tony Bono's and Joachim Martillo's claims to ownership of the '161 Application. In response, Tony Bono and Joachim Martillo submitted various documents, including a document dated February 15, 2013, that purports to assign Tony Bono's and Joachim Martillo's legal interests in the '161 Application to plaintiff. Because the OPLA determined that the documents Tony Bono and Joachim Martillo had submitted did not adequately demonstrate ownership in the '161 Application, the OPLA issued a Second Order to Show Cause dated June 10, 2013, challenging Tony Bono's and Joachim Martillo's ownership interests in the '161 Application.

Thereafter, on August 7, 2013, before Tony Bono and Joachim Martillo responded to the Second Show Cause Order, Suzanne Bono, then President of Clearpoint, executed a document titled "2013 Confirmatory Assignment," which purports to confirm a prior assignment of the '161 Application to Tony Bono and Joachim Martillo. Specifically, the 2013 Confirmatory Assignment: (i) provides that "Clearpoint received an assignment for [the '161 Application]," (ii) refers to Tony Bono and Joachim Martillo's desire to "formaliz[e] [a] prior transfer to them by Clearpoint of the entire right, title, and interest in [the '161 Application]," and (iii) purports to

“confirm the assignment and transfer unto [Tony] Bono and Joachim Martillo ... of Clearpoint’s entire right, title, and interest in, to, and under [the ‘161 Application].” AR at 2667.

Shortly thereafter, on August 9, 2013, Tony Bono and Joachim Martillo filed a response to the Second Order to Show Cause in which they presented various documents—including the 2013 Confirmatory Assignment—purporting to explain that before transferring their interests in the ‘161 Application to plaintiff, Tony Bono and Joachim Martillo were the true and full owners of the ‘161 Application on the ground that they had retained a reversionary interest in the ‘161 Application as a result of the 1988 Constellation Agreements, and that these interests had been confirmed by the 2013 Confirmatory Assignment.

Thereafter, on September 30, 2013, the OPLA issued a decision stating that the documents submitted by Tony Bono and Joachim Martillo adequately demonstrated ownership interests in the ‘161 Application sufficient to warrant proceeding with the prosecution of the ‘161 Application.

C.

On December 2, 2013, the PTO Examiner issued an Office Action finally rejecting claims 1, 2, and 5-41 of the ‘161 Application on various statutory grounds.⁹ And on March 3, 2015, the Patent Trial and Appeal Board (“PTAB”) affirmed the rejection of claims 1, 2, and 5-41.¹⁰ Thereafter, on June 4, 2015, the PTAB denied Tony Bono and Joachim Martillo’s Request

⁹ Specifically, the PTO Examiner: (i) rejected claims 1, 2, and 5-41 pursuant to 35 U.S.C. § 101; (ii) rejected claims 1, 2, and 5-41 pursuant to 35 U.S.C. § 112, ¶ 1; (iii) rejected claims 1, 2, and 5-41 pursuant to 35 U.S.C. § 112, ¶ 2; (iv) rejected claims 1, 2, 5-19, and 38-41 pursuant to 35 U.S.C. § 102(b); (v) rejected claims 20-23 pursuant to 35 U.S.C. § 102(e); and (vi) rejected claims 24-37 pursuant to 35 U.S.C. § 103(a).

¹⁰ Although the PTAB affirmed the result, it reversed some of the grounds on which the claims in issue had been rejected. Specifically, the PTAB (i) reversed the PTO Examiner’s rejection of claims 1, 2, and 5-39 pursuant to § 101, but affirmed the PTO Examiner’s rejection of claims 40

for Rehearing. In ruling on the Request for Rehearing, the PTAB modified its decision on the merits,¹¹ but this modification did not change the ultimate result—the rejection of all of the claims in issue—because the rejection of each claim remained affirmed pursuant to at least one statutory basis.

As already noted, the parties agree that all claims in issue (1, 2, 5-16, and 18-39) shall rise or fall with representative Claim 24.¹² And as already described, Claim 24 refers to a network switching device that allows a user to change configuration settings by means of (i) a static configuration method, or (ii) a dynamic configuration method. Claim 24 was denied by the PTO on the ground that it does not satisfy the written description requirement set forth in 35 U.S.C. § 112.

On July 29, 2015, plaintiff filed a complaint pursuant to 35 U.S.C. § 145, challenging the PTAB's final decision rejecting a rehearing on the '161 Application on the grounds that the decision was "unwarranted by the facts, unsupported by substantial evidence, arbitrary, capricious, an abuse of discretion or otherwise not in accordance with law." Compl. ¶ 15. After the PTO filed an answer, plaintiff moved for partial summary judgment with respect to one of the defenses included in the PTO's answer. Specifically, plaintiff contended that it was entitled to summary judgment with respect to the PTO's defense that plaintiff lacks standing to bring a

and 41 pursuant to § 101; (ii) affirmed the PTO Examiner's rejection of claims 1, 2, and 5-41 pursuant to § 112, ¶ 1; (iii) affirmed the PTO Examiner's rejection of claims 1, 2, and 5-41 pursuant to § 112, ¶ 2; (iv) reversed the PTO Examiner's rejection of claims 1, 2, 5-19, and 38-41 pursuant to § 102(b); (v) reversed the PTO Examiner's rejection of claims 20-23 pursuant to § 102(e); and (vi) reversed the PTO Examiner's rejection of claims 24-37 pursuant to § 103(a). In the end, the PTAB affirmed at least one statutory ground for the rejection of each claim in issue.

¹¹ Specifically, the PTAB reversed the PTO Examiner's rejection of claims 7-9, 17, 23, 25, and 40 pursuant to § 112, ¶ 1.

¹² The parties agree that plaintiff is not pursuing claims 17, 40, and 41.

§ 145 action because the administrative proceedings had already established that plaintiff has an ownership interest in the ‘161 Application, and therefore the PTO’s standing defense is barred by the doctrine of collateral estoppel. Plaintiff’s motion for partial summary judgment was denied by Order and Memorandum Opinion dated April 14, 2016, because (i) the PTO’s determination as to ownership of the ‘161 Application was a preliminary determination, not a final determination as to ownership, and in any event (ii) that determination was *ex parte* and non-adversarial, and therefore the doctrine of collateral estoppel did not apply. *See Realvirt, LLC v. Lee*, --- F. Supp.3d ---, No. 1:15-cv-963, 2016 WL 1532236, at *2-4 (E.D. Va. April 14, 2016).¹³

Thereafter, the parties filed cross-motions for summary judgment with respect to the merits of plaintiff’s § 145 action;¹⁴ the PTO also filed a motion to dismiss for lack of jurisdiction pursuant to Rule 12(b)(1), Fed. R. Civ. P., on the ground that plaintiff lacks standing to bring a § 145 action because it does not own the ‘161 Application, and therefore is not an “applicant” pursuant to § 145. The parties also filed a joint stipulation in which they agree that any disputes of material fact may be resolved by the Court on summary judgment.

¹³ Plaintiff also sought summary judgment with respect to the PTO’s claim, pursuant to § 145, for reasonable expenses, including attorney’s fees. Because the PTO had not yet sought to recover expenses pursuant to § 145, this motion for partial summary judgment was denied, as it was “neither necessary nor appropriate ... to determine whether the PTO seeks expenses beyond what the statute authorizes.” *Realvirt*, 2016 WL 1532236, at *4.

¹⁴ Specifically, plaintiff contends that the PTO’s decision denying Claim 24 of the ‘161 Application must be reversed, whereas the PTO contends that this decision must be affirmed because with respect to Claim 24, the ‘161 Application does not satisfy the written description requirement set forth in § 112. In this regard, the PTO contends that because the ‘161 Application specification lacks key details regarding the implementation and use of the inventions described in Claim 24, one of ordinary skill in the art would not conclude that the inventors were in possession of the claimed inventions, and therefore Claim 24 is not patentable pursuant to § 112. Specifically, the PTO contends (i) that the ‘161 Application specification identifies two methods for implementing a configuration routine—static and dynamic—but fails to include any description of how to implement the dynamic configuration method, and (ii) that the ‘161 Application specification lacks any description of the unique and custom hardware for the allegedly novel and non-obvious network switching device claimed.

II.

Article III, Section 2, clause 1 of the Constitution limits federal court jurisdiction to “Cases” and “Controversies,” and as the Supreme Court has explained, an “essential and unchanging part of the case-or-controversy requirement” is that a plaintiff must establish Article III standing to sue. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992). The well-settled test for standing requires that a litigant must demonstrate an “(1) injury in fact (2) that is fairly traceable to the defendant’s conduct and (3) that is likely to be redressed by a favorable decision.” *Retail Indus. Leaders Assoc. v. Fielder*, 475 F.3d 180, 186 n.1 (4th Cir. 2007) (citing *Lujan*, 504 U.S. at 560-61). To satisfy the injury-in-fact element of this test, a plaintiff must have “ ‘suffered ... an invasion of a legally protected interest [that] is (a) concrete and particularized, and (b) actual or imminent, not conjectural or hypothetical.’ ” *White Tail Park v. Stroube*, 413 F.3d 451, 458 (4th Cir. 2005) (quoting *Lujan*, 504 U.S. at 560-61).

The Federal Circuit has made clear that “[t]hese constitutional requirements for standing apply ... to appeals from administrative agencies such as the [PTO], to the federal courts.” *Consumer Watchdog v. Wisconsin Alumni Research Foundation*, 753 F.3d 1258, 1261 (Fed. Cir. 2014) (citing *Sierra Club v. E.P.A.*, 292 F.3d 895, 899 (D.C. Cir. 2002)). Importantly, however, “where Congress has accorded a procedural right to a litigant, such as a right to appeal an administrative decision, certain requirements of standing[,] namely immediacy and redressability[,] ... may be relaxed,” but “the ‘requirement of injury in fact is a hard floor of Article III jurisdiction that cannot be removed by statute.’ ” *Id.* (quoting *Summers v. Earth Island Inst.*, 555 U.S. 488, 496 (2009)). In this regard, § 145 provides that an “applicant dissatisfied with the decision of the [PTAB] ... may ... have remedy by civil action against the [PTO] Director... .” *Id.* In other words, § 145 provides a basis for subject matter jurisdiction only if a

plaintiff is an “applicant” of the patent application in issue, and therefore has standing to sue pursuant to § 145.

Importantly, it is well-settled that “when a defendant challenges the existence of subject matter jurisdiction in fact, the plaintiff bears the burden of proving the truth of such facts by a preponderance of the evidence.” *Vuuyuru v. Jadhav*, 555 F.3d 337, 347 (4th Cir. 2009). Moreover, as the Fourth Circuit has explained, where a defendant challenges the veracity of the facts underpinning subject matter jurisdiction, a district court “may consider evidence outside the pleadings without converting the proceeding to one for summary judgment.” *Velasco v. Gov’t of Indonesia*, 370 F.3d 392, 398 (4th Cir. 2004).

III.

The PTO’s Rule 12(b)(1) motion to dismiss raises a threshold jurisdictional issue regarding whether plaintiff lacks standing to bring a claim pursuant to § 145 because plaintiff does not have a legal interest in the ‘161 Application.¹⁵ Put another way, the PTO contends that although § 145 creates a private cause of action, plaintiff does not fall within the class of persons to whom the cause of action is granted, namely patent applicants. If the PTO is correct that plaintiff lacks standing to bring a § 145 action, plaintiff’s complaint must be dismissed, and the merits need not be reached. But if plaintiff has standing to maintain a § 145 action, the merits of the parties’ cross-motions for summary judgment must be addressed.

Plaintiff purports to be an “applicant” with standing to bring a § 145 action on the ground that Tony Bono and Joachim Martillo assigned their interests in the ‘161 Application to plaintiff

¹⁵ A party’s standing to sue may be challenged on a motion to dismiss at any time because “[s]tanding represents a jurisdictional requirement which remains open to review at all stages of the litigation.” *Nat’l Org. for Women v. Scheidler*, 510 U.S. 249, 255 (1994); *see also* Rule 12(h)(3), Fed. R. Civ. P. (“If the court determines at any time that it lacks subject-matter jurisdiction, the court must dismiss the action.”).

in February 2013. The PTO contends that this purported assignment did not in fact assign any interest in the ‘161 Application to plaintiff because at the time of the purported assignment, Tony Bono and Joachim Martillo had no legal interests in the ‘161 Application. As a result, the PTO contends that plaintiff has no legal interest in the ‘161 Application, and therefore lacks standing to bring a § 145 action. Thus, in determining whether plaintiff has standing, the central issue is whether Tony Bono and Joachim Martillo owned the ‘161 Application in February 2013 when they purportedly assigned the ‘161 Application to plaintiff.

The Federal Circuit has explained that “state law, not federal law, typically governs patent ownership,” and presumably the same principle holds true for ownership of patent applications. *Akazawa v. Link New Tech. Int’l, Inc.*, 520 F.3d 1354, 1357 (Fed. Cir. 2008). Importantly, however, where there is a conflict between federal law and state law, federal law preempts state law. *See, e.g., Altria Group, Inc. v. Good*, 555 U.S. 70, 76 (2008) (“[W]e have long recognized that state laws that conflict with federal law are ‘without effect.’ ”) (quoting *Maryland v. Louisiana*, 451 U.S. 725, 746 (1981)). Here, the parties agree that Massachusetts contract law applies,¹⁶ but importantly, there are a few pertinent principles of federal law that preempt any conflicting Massachusetts laws.

To begin with, as the Federal Circuit has made clear, 35 U.S.C. § 261 “requires that all assignments of patent interest[s] be in writing.” *Sky Technologies LLC v. SAP AG*, 576 F.3d

¹⁶ Applying Virginia choice-of-law principles, *see Klaxon Co. v. Stentor Elec. Mfg. Co.*, 313 U.S. 487, 496 (1941), questions concerning the validity, effect, and interpretation of a contract are resolved according to the principle of *lex loci contractus*, *i.e.*, the law of the state where the contract was made controls. *Woodson v. Celina Mut. Ins. Co.*, 211 Va. 423, 426 (1970) (citing *CIT Corp v. Guy*, 170 Va. 16, 22 (1938)). Here, all of the contracts in issue were formed—or purportedly formed—in Massachusetts. Thus, Massachusetts law applies.

1374, 1379 (Fed. Cir. 2009).¹⁷ An “assignment” is “a transfer by a party of all or part of its right, title and interest in,” *inter alia*, a “patent application.” 37 C.F.R. § 3.1. Importantly, however, the Federal Circuit has made clear that “ ‘there is nothing that limits assignments as the only means for transferring patent ownership,’ ” as “ ‘ownership of a patent may [also] be changed by operation of law.’ ” *Id.* at 1380 (quoting *Akazaw*, 520 F.3d at 1356). For example, in *Akazaw*, the Federal Circuit held that the passage of a patent’s title through intestacy did not require a written document because that transfer of ownership was not an assignment, and therefore was not subject to the § 261 written assignment requirement. *Akazaw*, 520 F.3d at 1358. Similarly, in *Sky Technologies*, the Federal Circuit held that “foreclosure under state law may transfer patent ownership” without a written document. *Sky Technologies*, 576 F.3d at 1380. Notwithstanding these and other means of transferring ownership of a patent interest by operation of law, § 261 clearly requires a party transferring ownership of a patent interest by means of an *assignment* to do so in writing.

In addition to the § 261 written assignment requirement, federal law also preempts state law with respect to the question “whether a patent assignment clause creates an automatic assignment or merely [a future] obligation to assign,” as that question “is intimately bound up with the question of standing in patent cases.” *DDB Techs., L.L.C. v. MLB Advanced Media*,

¹⁷ The Federal Circuit in *Sky Technologies* noted that the written assignment requirement “dates back to the 1881 Supreme Court decision in *Ager v. Murray*, which held that a debtor’s interest in a patent that would be used to satisfy a judgment against him was property, ‘assignable by him, and ... [could not] be taken on execution at law.’ ” *Sky Technologies*, 576 F.3d at 1379 (quoting *Ager v. Murray*, 105 U.S. 126, 131-31 (1881)). In *Ager*, the Supreme Court “held that the patentee was required to execute a writing to assign title, or a trustee would be appointed to execute an assignment, ‘if the patentee should not himself execute one as directed.’ ” *Id.* (quoting *Ager*, 105 U.S. at 131). As the Federal Circuit in *Sky Technologies* explained, the Supreme Court’s decision in *Ager* “was based on the idea that a creditor cannot reach incorporeal property, such as a patent, due to its intangible nature; the transfer (either voluntary or involuntary) to a purchaser must be done by written assignment ‘in order to vest [the purchaser] with a complete title to the property.’ ” *Id.* (quoting *Ager*, 105 U.S. at 130).

L.P., 517 F.3d 1284, 1296 (Fed. Cir. 2008). In this regard, the Federal Circuit has explained that “contracts that obligate the owner to grant rights in the future do not vest legal title to the patents in the assignee.” *Abraxis Bioscience, Inc. v. Navinta LLC*, 625 F.3d 1359, 1364-65 (Fed. Cir. 2010). Put another way, “contract language stating that a party ‘agrees to assign’ reflects a mere promise to assign rights in the future, not an immediate transfer of expectant interests.” *Id.* at 1365 (citing *DDB Techs.*, 517 F.3d at 1290). Indeed, where a party merely agrees to assign a patent interest at a future date, the future assignment “must be implemented by a written assignment.” *IpVenture, Inc. v. Prostar Computer, Inc.*, 503 F.3d 1324, 1327 (Fed. Cir. 2007). This is so because an agreement to assign a patent interest at some point in the future does not create “a present assignment of an expectant interest.” *Arachnid, Inc. v. Merit Indus., Inc.*, 939 F.2d 1574, 1581 (Fed. Cir. 1991). Although such an agreement “may vest the promisee with *equitable* rights” once the future conditions are satisfied, it “does not by itself vest *legal* title to patents ... in the promisee.” *Id.* (citing George T. Curtis, *A Treatise on the Law of Patents* § 170 (4th ed. 1873)).

These principles of federal law, applied here, point persuasively to the conclusion that plaintiff lacks standing to bring a § 145 action because plaintiff’s purported predecessors in interest—Tony Bono and Joachim Martillo—did not have a legal interest in the ‘161 Application when they attempted to transfer ownership of the ‘161 Application to plaintiff in February 2013. Specifically, by virtue of the 1992 Assignment, Tony Bono and Joachim Martillo assigned their “entire right, title, and interest in, to and under [the ‘161 Application]” to Clearpoint “for good and valuable consideration from Clearpoint.” AR at 95-96. And after the 1992 Assignment, no written document assigned any interest in the ‘161 Application to Tony Bono or Joachim Martillo.

Indeed, the only written document that could possibly be construed to assign a legal interest in the '161 Application to Tony Bono and Joachim Martillo is the 2013 Confirmatory Assignment, which purports to confirm an assignment of a legal interest in the '161 Application from Clearpoint to Tony Bono and Joachim Martillo. Yet, this document cannot be construed as an effective assignment of the '161 Application because when it was executed in August 2013, Clearpoint had no legal interest in the '161 Application to assign, as Clearpoint had previously assigned its entire interest in the '161 Application to Penril pursuant to the 1993 Penril Purchase Agreement.¹⁸ Nor can the 2013 Confirmatory Assignment be construed as a valid confirmation of an earlier assignment of the '161 Application from Clearpoint to Tony Bono and Joachim Martillo because the record reflects no evidence that any such prior assignment occurred. In this regard, plaintiff points to the purported 1988 Oral Agreement, but that oral agreement, assuming it exists, does not constitute an effective assignment of the '161 Application to Tony Bono and Joachim Martillo because § 261 “requires that all assignments of patent interest[s] be in writing.” *Sky Technologies*, 576 F.3d at 1379. Thus, no effective assignment restored ownership of the

¹⁸ In this respect, the 1993 Penril Purchase Agreement provides that “[Clearpoint] hereby sells, assigns, conveys, transfers and delivers to [Penril], and [Penril] hereby purchases and acquires the Assets, including all of [Clearpoint’s] right, title and interest therein and thereto free and clear of any liens, pledges, security interests, claims or encumbrances of any kind.” 1993 Penril Purchase Agreement, at 4. The “Assets” Clearpoint assigned to Penril include, *inter alia*, “[a]ll patents, patent rights, ... [and] applications for patents ... relating to the Software and the Hardware Designs.” *Id.* at 2. The 1993 Penril Purchase Agreement further reflects (i) that “[Clearpoint] is the true and lawful owner of the Assets and has full power and right to sell, assign and transfer to [Penril] all of its rights, title and interest in and to the Assets”; (ii) that “[Clearpoint] owns the patents ... existing or pending, listed in Exhibit 4 hereto,” namely the '161 Application; (iii) that “there are no agreements or arrangements between [Clearpoint] and any third person which would have any effect upon Seller’s title to and other rights respecting the Assets,” *id.* at 8; and (iv) that “no third party has any interest of any kind in any of the Assets,” except for “such interest or right, if any, as is described in Exhibit 3 hereto [the 1988 Letter Agreement] and same does not and will not interfere in any way with [Penril’s] right and ability to use the Assets without monetary or other obligation of any kind to the parties identified in said Exhibit 3 [the 1988 Letter Agreement],” *id.* at 9. Thus, by virtue of the 1993 Penril Purchase Agreement, Clearpoint assigned its entire interest in the '161 Application to Penril.

‘161 Application to plaintiff’s purported predecessors in interest—Tony Bono and Joachim Martillo—after they assigned their entire interests in the ‘161 Application to Clearpoint in 1992. As a result, Tony Bono’s and Joachim Martillo’s purported assignment of their ownership interests in the ‘161 Application to plaintiff in 2013 was ineffective because at that time, Tony Bono and Joachim Martillo had no such ownership interest to assign. *See Abraxis Bioscience*, 625 F.3d at 1365 (explaining that a party cannot assign a patent without holding title at the time of transfer). Thus, plaintiff lacks standing to bring a § 145 action because it is not an “applicant” within the meaning of that statute.

In opposition to the conclusion reached here, plaintiff contends that although there was no valid *assignment* of the ‘161 Application from Clearpoint to Tony Bono and Joachim Martillo, Clearpoint nonetheless transferred ownership of the ‘161 Application to Tony Bono and Joachim Martillo by operation of Massachusetts law, and therefore § 261 does not apply. *See Sky Technologies*, 576 F.3d at 1380 (explaining that “ ‘there is nothing that limits assignments as the only means for transferring patent ownership,’ ” as “ ‘ownership of a patent may [also] be changed by operation of law’ ”) (quoting *Akazaw*, 520 F.3d at 1356). Specifically, plaintiff contends that pursuant to the 1988 Oral Agreement, Clearpoint agreed to assign patent interests related to the Constellation network switching device—*i.e.*, the ‘161 Application—to Joachim Martillo and Tony Bono upon the occurrence of certain future events, namely in the event (i) that Tony Bono and Joachim Martillo finished developing the Constellation network switching device while employed by Clearpoint, and (ii) that Clearpoint cancelled the Constellation Project or parted ways with Tony Bono and Joachim Martillo. Plaintiff further contends that these conditions were satisfied in January 1993—after the 1992 Assignment—when Clearpoint fired

Tony Bono and Joachim Martillo,¹⁹ and therefore Clearpoint's interest in the '161 Application reverted to Tony Bono and Joachim Martillo in January 1993, prior to Clearpoint's assignment of all of its assets—including the '161 Application—to Penril on July 29, 1993, pursuant to the 1993 Penril Purchase Agreement. In other words, plaintiff contends (i) that pursuant to the 1988 Oral Agreement, Tony Bono and Joachim Martillo retained a reversionary interest in the '161 Application such that ownership of the '161 Application would revert to Tony Bono and Joachim Martillo upon the occurrence of certain future conditions, and (ii) that once these conditions were satisfied in January 1993, Clearpoint's interest in the '161 Application transferred to Tony Bono and Joachim Martillo by operation of Massachusetts law, and therefore the transfer was not subject to the § 261 written assignment requirement.

In support of this theory, plaintiff cites a single decision by a lower state court in Massachusetts for the proposition that “[o]ral contracts are as enforceable as written contracts so long as they are not barred by the Statute of Frauds.” *Brewster Wallcovering Co. v. Blue Mountain Wallcoverings, Inc.*, 864 N.E.2d 518, 534 n.40 (Mass. App. Ct. 2007) (citing *Kilham v. O’Connell*, 315 Mass. 721, 724-25 (1944)). Even assuming this is an accurate statement of Massachusetts law, it is entirely inapplicable here. Plaintiff does not address—nor does *Brewster* resolve—the essential question at issue here, namely whether a party may circumvent the § 261 written assignment requirement by entering an oral agreement to assign an interest in a patent application upon the occurrence of future conditions. With respect to this question, the Federal Circuit has made clear that a party may not so circumvent the § 261 written assignment requirement. Specifically, the Federal Circuit has explained that an agreement to assign a patent

¹⁹ The first condition—that Tony Bono and Joachim Martillo finished developing the Constellation network switching device while employed by Clearpoint—had already been met, as the '161 Application was filed on October 8, 1991.

interest at some point in the future does not create “a present assignment of an expectant interest,” *Arachnid*, 939 F.2d at 1581. Thus, where, as here, a party merely agrees to assign a patent interest at a future date, the future assignment “must be implemented by a written assignment” in accordance with § 261. *IpVenture*, 503 F.3d at 1327.²⁰ To reach a contrary conclusion would lead to the anomalous result that parties could avoid the § 261 written assignment requirement simply by entering into an oral agreement to assign a patent interest at some future date.

In this regard, plaintiff points to no evidence to support the conclusion that once the conditions contemplated by the 1988 Oral Agreement were satisfied, an assignment from Clearpoint to Tony Bono and Joachim Martillo was implemented by a written document before Clearpoint assigned all of its assets—including the ‘161 Application—to Penril pursuant to the 1993 Penril Purchase Agreement. Hence, Tony Bono’s and Joachim Martillo’s purported assignment of their ownership interests in the ‘161 Application to plaintiff in 2013 was ineffective, as at that time, Tony Bono and Joachim Martillo had no such interest to assign. *See*

²⁰ Moreover, the parties have cited no cases—nor have any been found—that support the proposition that a voluntary agreement between parties is not an assignment, but rather a transfer of ownership rights by operation of law. Indeed, the cases cited reflect that the “by operation of law” exception to § 261 does not encompass agreements between parties but extends only to other legal events—such as the passage of legal title through intestacy and the passage of title by virtue of foreclosure—that operate to transfer ownership automatically by law. *See, e.g., Akazaw*, 520 F.3d at 1358 (holding that the § 261 written assignment requirement did not apply to the passage of a patent’s title through intestacy); *Sky Technologies*, 576 F.3d at 1380 (holding that the § 261 written assignment requirement did not apply to a transfer of patent ownership by virtue of foreclosure under state law). This conclusion comports with the sense in which “by operation of law” is generally used. *See, e.g., Black’s Law Dictionary* 1265 (10th ed. 2014) (defining “operation of law” as “[t]he means by which a right or liability is created for a party regardless of the party’s actual intent”); *id.* at 143 (defining “assignment by operation of law” as “[a] transfer of a right or obligation as a necessary consequence of legal status regardless of the affected party’s intent”).

Abraxis Bioscience, 625 F.3d at 1365 (explaining that a party cannot assign a patent without holding title at the time of transfer).

During oral argument, plaintiff raised additional arguments based on a supplemental pleading that plaintiff filed at 11:42 p.m. the night before oral argument. *See Realvirt, LLC v. Lee*, No. 15-cv-963 (E.D. Va. July 14, 2016) (Supplemental Pleading) (Doc. 53). In support of plaintiff's supplemental pleading, plaintiff submitted a PTO record of the '161 Application that reflects a summary of the '161 Application's chain of title ("Chain of Title Summary"). *See* Pl. Supp. Pleading, Ex. 1, Chain of Title Summary. It appears this document was created in connection with the PTO proceedings to revive the '161 Application. Plaintiff notes that the Chain of Title Summary reflects that in 2010, the PTO determined that Clearpoint assigned the '161 Application to Tony Bono and Joachim Martillo, and on this basis, plaintiff contends that the Chain of Title Summary constitutes a written assignment of the '161 Application to Tony Bono and Joachim Martillo. Yet, contrary to plaintiff's contention, the Chain of Title Summary does not constitute a written assignment of the '161 Application because (i) this document is not a final PTO determination, but merely a PTO record reflecting that Tony Bono and Joachim Martillo produced documents purporting to establish their legal interests in the '161 Application,²¹ and (ii) even assuming, *arguendo*, that the Chain of Title Summary could be

²¹ Specifically, the Chain of Title Summary was based on (i) the 1988 Letter Agreement, and (ii) a Declaration of Vincent Bono, dated June 30, 2008, in which Vincent Bono avers that Clearpoint entered into the 1988 Oral Agreement with Tony Bono and Joachim Martillo, and that this agreement gave Tony Bono and Joachim Martillo a reversionary interest in the '161 Application upon the occurrence of certain future events. *See* Pl. Supp. Pleading, Ex. 2, Vincent Bono Decl. (June 30, 2008). These documents in no way support a conclusion that prior to the 1993 Penril Purchase Agreement, Clearpoint entered into a valid written agreement assigning the '161 Application to Tony Bono and Joachim Martillo. At best, these documents support plaintiff's flawed theory that an oral agreement to assign a patent application at some point in the future can circumvent the § 261 written assignment requirement. As already explained, the Federal Circuit has made clear that an agreement to assign a patent at some point in the future

construed as a valid written assignment from Clearpoint to Tony Bono and Joachim Martillo, the Chain of Title Summary was created in 2010, nearly two decades after Clearpoint assigned its ownership of the ‘161 Application to Penril by virtue of the 1993 Penril Purchase Agreement. Thus, when the Chain of Title Summary was created in 2010, Clearpoint had no interest in the ‘161 Application to assign to Tony Bono and Joachim Martillo. *See Abraxis Bioscience*, 625 F.3d at 1365 (explaining that a party cannot assign a patent without holding title at the time of transfer).

Plaintiff further contends that the 1993 Penril Purchase Agreement is void because that agreement was not recorded with the PTO. This argument also fails. Although plaintiff is correct that § 261 provides that “[a]n interest that constitutes an assignment ... shall be void as against any subsequent purchaser or mortgagee for a valuable consideration” unless the assignment is “recorded” with the PTO, § 261 further provides that such an assignment is void *only if* the subsequent purchaser is “without notice” of the assignment. 35 U.S.C. § 261. Here, the 1993 Penril Purchase Agreement is not void because Tony Bono and Joachim Martillo signed the 1993 Penril Letter Agreements, which clearly reflect that Tony Bono and Joachim Martillo were on notice of the 1993 Penril Purchase Agreement.²² Thus, plaintiff’s late-hour arguments do not alter the result reached here; plaintiff lacks standing to bring a § 145 action because plaintiff has

does not create “a present assignment of an expectant interest,” *Arachnid*, 939 F.2d at 1581, and therefore, where, as here, a party merely agrees to assign a patent interest at a future date, the future assignment “must be implemented by a written assignment” in accordance with § 261, *IpVenture*, 503 F.3d at 1327.

²² Specifically, on October 1, 1993, Tony Bono and Joachim Martillo signed the 1993 Penril Letter Agreements, in which they (i) confirmed receipt of copies of the 1993 Penril Purchase Agreement; (ii) confirmed that “performance by Clearpoint and by Penril of their respective obligations [under the 1993 Penril Purchase Agreement] are not inconsistent with or violative of any agreement between [Tony Bono and Joachim Martillo] and Clearpoint,” AR at 402, 405; and (iii) represented that they held “no rights or interest in [the ‘161 Application] except to the extent described in [the 1988 Letter Agreement],” AR at 403, 406.

failed to establish by a preponderance of the evidence that plaintiff is an “applicant” within the meaning of that statute.

Finally, it is worth noting that even assuming, *arguendo*, that one of plaintiff’s legal theories is cognizable, plaintiff’s contention that it has standing to bring a § 145 action nonetheless fails because plaintiff has not established by a preponderance of the evidence the existence of any agreement purporting to grant Tony Bono and Joachim Martillo a reversionary interest in the ‘161 Application. In this regard, plaintiff relies on the purported 1988 Oral Agreement to support its contention that Tony Bono and Joachim Martillo retained a reversionary interest in the ‘161 Application, yet no persuasive record evidence supports the conclusion that Clearpoint entered into the purported 1988 Oral Agreement with Tony Bono and Joachim Martillo, but instead firmly supports the conclusion that Clearpoint never orally agreed to assign an interest in the ‘161 Application to Tony Bono and Joachim Martillo upon the occurrence of certain future conditions.²³

²³ Specifically, the record reflects: (i) that neither the 1988 Letter Agreement nor the 1992 Assignment mention any reversionary right in the ‘161 Application held by Tony Bono or Joachim Martillo; (ii) that by virtue of the 1993 Penril Letter Agreements, Tony Bono and Joachim Martillo represented that they held “no rights or interest in [the ‘161 Application] except to the extent described in [the 1988 Letter Agreement],” AR at 403, 406; and (iii) that for fourteen years, Tony Bono and Joachim Martillo made repeated unsuccessful attempts to secure a document from Vincent Bono recognizing their ownership of the ‘161 Application. As already noted, in support of plaintiff’s contention that the 1988 Oral Agreement gave Tony Bono and Joachim Martillo a reversionary interest in the ‘161 Application, plaintiff points to the June 30, 2008 Declaration of Vincent Bono in which Vincent Bono avers that Clearpoint entered into the 1988 Oral Agreement with Tony Bono and Joachim Martillo. *See* Vincent Bono Decl. (June 30, 2008). Yet, this declaration is unpersuasive—and is not credible—in light of the fourteen-year period during which Vincent Bono refused to sign a document recognizing Tony Bono’s and Joachim Martillo’s ownership interests in the ‘161 Application. Thus, on the whole, the record evidence firmly supports a conclusion that Clearpoint never orally agreed to assign an interest in the ‘161 Application to Tony Bono and Joachim Martillo upon the occurrence of certain future conditions.


In sum, plaintiff's purported predecessors in interest—Tony Bono and Joachim Martillo—did not have a legal interest in the '161 Application when they attempted to transfer ownership of the '161 Application to plaintiff in February 2013 because (i) at that time, Tony Bono and Joachim Martillo had already assigned their interests in the '161 Application to Clearpoint by virtue of the 1992 Assignment, and (ii) after the 1992 Assignment, no written document assigned any interest in the '161 Application to Tony Bono and Joachim Martillo. Accordingly, plaintiff has failed to establish by a preponderance of the evidence that it is an "applicant" within the meaning of § 145, and therefore has failed to establish standing to maintain this § 145 action.

IV.

Accordingly, for the reasons stated here, the PTO's motion to dismiss for lack of subject matter jurisdiction must be granted, and plaintiff's complaint must be dismissed. It is neither necessary nor appropriate to reach the merits of the parties' dispute whether the PTAB erred in rejecting the patentability of the claims included in the '161 Application.

An appropriate Order will issue.

Alexandria, Virginia
July 19, 2016



T. S. Ellis, III
United States District Judge